component) and a credit from International Development Association (IDA) of US$ 79 million (of which US $ 60 million is for rail component). The total estimated cost of rail component of this project is Rs. 3125 crores. The loan has become effective on 6th November 2002.

(ii) Kreditanst it for Wiederafbau (KIW)company has extended a loan of Deutsche mark (DM) 185 *minister of* finance the project of Modernisation of Signalling and Te*lecomunication.* between Ghaziabad and Kanpur. The estimated cost of this project is Rs. 425 crores. The loan is valid up to 31.12.2006

Auxiliary Warning System in Railways

*69. SHRI RAMA MUNI REDDY SIRIGIREDDY: Will the Minister of RAILWAYS be pleased to state:

(a) whether Railways is planning to adopt a new Auxiliary Warning System to strengthen the safety and security of passengers and rail installications;

(Jo) what is the difference between AWS and the train protection and warring system recommended by Khanna Committee; and

(c) how the outside interference with rail installations such as track and signalling equipment is likely to be curtailed with the help of the above warning system?

THE MINISTER OF RAILWAYS SHRI NITISH KUMAR: (a) Yes, Sir. It has been planned to adopt Train Protection and Warning System (TPWS), a variant of Auxiliary Warning System (AWS), to further enhance safety levels in train operations by preventing cases of 'Signal Passed at Danger' in 280 Track kilometres of 'A' route on Southern and North Central Railways, on trial basis.

(b) Functionality wise there is no difference between the two systems, which are basically meant to prevent driver passing signal at danger. However, both the system use different technologies to achieve the intended functionality.

(i) The conventional AWS system uses track magnets, which are basically made of Copper, as track device making it prone to thefts. Information about signal aspect, in AWS, is transmitted from track device to cab equipment through electro magnetic induction.

(ii) TPWS uses Euro Balise as a track device, which is an electronic device with very less Copper inside and it uses radio transmission for sending information to cab equipment.

(c) TPWS is basically meant to prevent driver from passing a signal at danger thereby preventing accident thereof. The system does not have any functionality, which can curtail outside interference of rail installations, such as track and signalling equipment.

East Coast Railway Headquarters

*71. SHRI RAMACHANDRA KHUNTIA: Will the Minister of RAILWAYS be pleased to state:

(a) whether it is a fact that East Coast Railway has not yet become functional and many trains including Rajdhani Express which are operating from Bhubaneswar are being controlled by GM, Railway, Garden Reach, Kolkata;

(b) total number of staff and officers required for East Coast Railway Headquarters and the total staff in position; and

(c) total budget allocation for East Coast Railway Zone and year-wise allocation till today?

THE MINISTER OF RAILWAYS (SHRI NITISH KUMAR : (a) East Coast Railway has ben functional with effect from 1.4.2003 and Operation of trains including Rajdhani Express from Bhubaneswar is now being controlled by this Railway.

(b) Adequate number of officers and staff required for managing East Coast Railway at present are available. As on date 95 officers and 617 staff are working on East Coast Railway Headquarters. The strength is kept under review for further augmentation on need basis.

(c) Year-wise total Budget allocation since 1997-98 and upto March, 2004 for setting up East Coast Railway Zone is as under:

Year	Budget allocation (in Rs. crores)
1997-98	5.24
1998-99	4.50'
1999-00	0.60
2000-01	0.30
2001-02	0.50
2002-03	4.00
2003-04	6.50